Part B
LEAD AGENCY/BUREAU AND/OR SUBCOMMITTEE/WORKING GROUP REPORT (Agencies with Lead Responsibilities Assigned under Circular A-16 in Appendix E - http://www.fgdc.gov/publications/a16final.html#appendixe) (Please provide a separate report for each activity for which you have the lead)

1. **Program/Activity Name:**

Flood Map Modernization

2. **What are the specific federal programs these data support?**

National Flood Insurance Program

3. **Uses of Data: How do your data benefit customers and support agency missions?**

The data directly supports the FEMA objective of reduction of losses to life and property.

4. **Charter/Plan: Do you have a current charter or plan for collection? If so - please describe (include how recently the charter/plan was implemented and whether it is in need of update).**

The plan for mapping modernization, including data collection, can be found at: http://www.fema.gov/fhm/mh_mhip.shtm

5. **Performance Measures: Does your agency have performance measures for your data theme? If so, please list the measures and whether you achieved your goals.**

FEMA's Key Performance Parameter (KPP) for Map Modernization measures the percentage of the population whose safety is improved through the availability of accurate flood risk data in GIS format. Ultimately, FEMA plans to increase the safety for at least 85 percent of the U.S. population through availability of accurate flood risk data in GIS format. This goal is reflected in FEMA's overall performance parameter for Map Modernization, as shown in table 1-1.

Table 1-1. Map Modernization Key Performance Parameter

Parameter	Threshold	Objective
% of the population whose safety is improved through availability of accurate flood risk data in GIS format	85%	100%

Table 1-2 lists the annual targets for each of the supporting key performance indicators (KPIs). The targets began in FY04, the first year of full funding. The KPIs are national KPIs. Some regional statistics may exceed these KPIs and others may fall short; however, all regional statistics will roll up to the national KPIs. Section 6, Production Analysis, presents actual and projected achievement for each of these KPIs, from current status through projected status for FY10.

Table 1-2. Map Modernization Key Performance Indicators

Key Performance Indicators		Targets					
KPIs	Management Indicators	FY04	FY05	FY06	FY07	FY08	FY09
KPI 1	% of population with digital GIS flood data available on-line	20%	50%	65%	75%	85%	97%
KPI 2	% of population with adopted maps that meet quality standards	10%	20%	35%	50%	70%	90%
KPI 3	Leveraged digital GIS flood data	20%	20%	20%	20%	20%	20%
KPI 4	% of appropriated funds sent to CTPs	20%	25%	33% *	33% *	33% *	33% *

Note: KPIs 1 and 2 are cumulative; KPIs 3 and 4 are annual

* These targets for FY06-FY09 depend on the ability to develop state and local capability. There are significant assumptions in KPI 4 and FEMA is examining strategies to increase the target numbers.

6. **Metadata Status: Is metadata discoverable and served through the NSDI Clearinghouse? What percentage of this theme's data has metadata and is in a Clearinghouse node?**

Yes. 100%.

7. **Standards: What is the status of this theme's data, process, transfer, and classification standards?**

Data and classification standards are constantly evolving through an organized process. Transfer standards currently implemented as a WMS service.

8. **Progress: List FY 2004 activities/progress to date (quantify where possible).**

Because of the size and scope of FEMA's Map Modernization Program, coordination with partners has been identified as one of the key priorities for implementation of the program, including identification of partnerships as one of the four key program objectives in the Statement of Objectives for the National Service Provider contract. The key to the overall coordination strategy is disciplined planning done transparently and coordinated with our partners. This includes the Multiyear Flood Hazard Identification Plan (MHIP), and the State and FEMA Region business plans. Because of the long-standing Federal goals to better integrate geospatial data coordination, Map Mod is also focusing specifically on policies and processes to maximize coordination and partnerships for geospatial data. Communication with potential partners through the National Digital Elevation Program (NDEP), National Digital Orthophoto Program (NDOP) and the Geospatial One-Stop (GOS) is integrated into the Map Mod lifecycle from the MHIP, through project scoping and production. In addition to this national level coordination, each project will be coordinated at the State and local level in cooperation with existing State coordination processes.

The MHIP is a five-year plan for the implementation of the Map Mod program. It identifies each county in the U.S., provides a schedule for mapping in that county and an

estimated budget. By coordinating the development of this plan directly with our State partners and by publishing this plan each year, we hope to align Map Mod with existing mapping programs and enable our partners to plan their own mapping activities to align with Map Mod. Long range planning by Map Mod is critical for State and local partners to budget and plan their own programs. In parallel to the MHIP, partners that want to help manage Map Mod in their State developed business plans for implementing the program. These State Business Plan are integrated with and form the foundation of the Regional Business Plans developed by each FEMA Regional Office for implementing Map Mod. To support these efforts, FEMA entered into a cooperative agreement with the Association of State Floodplain Managers (ASFPM) to help FEMA develop and implement a planning process that works for the States.

The two most critical geospatial data types for Map Modernization are land elevation data and accurate horizontal reference data for a base map. There are two Federal coordinating bodies that focus specifically on these two data types. The National Digital Elevation Program works to coordinate across agencies on elevation data and the National Digital Orthophoto Program coordinates across agencies on orthoimagery. Orthoimagery is aerial photos that are corrected to have the accuracy characteristics of a map. Orthoimagery generally shows roads, streams, buildings and other physical features very accurately and so it is an effective base map for Map Mod. FEMA also participates in the Federal Geographic Data Committee Coordination Working Group and Spatial Water Data Subcommittee.

Because the Map Mod Program is executed regionally, but needs to integrate with national geospatial data coordination efforts, Map Mod is integrating geospatial coordination activities into the central technology platform for the program. The Multihazard Information Platform (MIP) is a system that will be used by FEMA Headquarters, the National Service Provider contractors, all the FEMA Regional Offices and their contractors and partners for production of map products and for tracking and managing projects. This system will be directly integrated with the coordination efforts of the NDOP and NDEP and will report directly to the GOS system. As a result, information about geospatial data for Map Mod will be available to all interested parties from when a county is first scheduled in the MHIP, through the more detailed project planning steps and all the way through production. Map Mod policies require that FGDC and GOS requirements be met so that all data collected or produced by Map Mod is properly documented and available to the public.

In addition to coordination at the National level, Map Mod is also working to insure that coordination happens successfully at the local level. The National Service Provider and the FEMA Regional Offices will establish a standardized coordination process for each State. This plan will identify the correct local contacts at the State and local levels as well as Federal Agency staff will responsibility for that State. Contractors working in each state will be required to follow these procedures to insure that the proper coordination takes place for each project and that National requirements are met. To help develop these state geospatial coordination plans, FEMA entered into a cooperative agreement with the National States Geographic Information Council (NSGIC). In

addition to working on developing these plans, NSGIC also devoted a large portion of their annual meeting in September 2004 to FEMA's Map Mod. These sessions provided the State representatives a detailed overview of the program, opportunities to get their questions answered and then breakout sessions for each FEMA Region, their States and other Federal Agency representatives to discuss local coordination plans.

FEMA has also tasked one of our contractors to look specifically at the issue of LIDAR coordination for Map Mod. This study will provide a plan for how FEMA can utilize the LIDAR collected by the National Geospatial-Intelligence Agency (NGA) under the Urban Areas program for Map Mod. It will also coordinate with other Federal stakeholders to determine how to make LIDAR collected by Map Modernization as useful as possible for other applications. Already FEMA and NGA are coordinating on using the NGA LIDAR for a flood study in Cleveland, OH as the first step in this process.

9. **Participation: List participating Federal agencies.**

FEMA coordinates actively with NOAA, USGS, USACE, USFS, NRCS, FSA, Census, NGA and BLM. In addition to work through the NDOP and NDEP, the following activities have been a focus.

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FEMA and the National Geodetic Survey (NGS) have also been working together to better coordinate Map Mod with NGS's Height Modernization Program. NGS has temporarily assigned a staff member to work specifically on this effort. FEMA also plans to enter into a Memorandum of Agreement with the USGS to formalize the existing plans to share data collected for Map Mod and the USGS National Map effort and insure there is no unnecessary duplication of effort. The US Army Corps of Engineers is actively working with FEMA to identify any elevation data holding they have that can support Map Modernization.

10. **Policy: Do you have a formal agency policy in place for full and open access or data sharing? Are you able to fulfill this policy and provide public access with your current agency financial resources as allocated or are you in pursuit of collaborative federal partnerships to support data**

access?

FEMA's Flood Hazard Mapping program does have a full and open policy for data sharing. We are currently modernizing our data standards and archiving system to support improved access to our data. We are able to do this with current agency financial resources, but hope to work with the USGS to avoid FEMA archiving and distribution of orthoimagery.

11. **Are there areas or issues regarding lead responsibilities for spatial data themes that require attention, or lessons-learned that you would like to share with others? Please describe.**